

PATENT APPLN. NO. 10/552,616
SUBMISSION UNDER 37 C.F.R. § 1.114

PATENT

IN THE CLAIMS:

1. (withdrawn) A method for reducing kinetic friction, characterized in that devices and appliances (1-15) of different materials, sizes and shapes are provided with profiled surface patterns to reduce kinetic friction when the said devices and appliances are in contact with air, gas or liquid masses.

2. (withdrawn) A method according to claim 1, characterized in that the surfaces of the devices and appliances of different materials, sizes and shapes are profiled with differently sized sunken or raised patterns or with combinations of such patterns, or even helical patterns, wherein the surfaces profiled with sunken and raised patterns may be the shape of a spherical calotte or truncated cone or imitations of these shapes and/or imitations of polygonal, roundish or oval shapes, or resembling the shape of the edge of a closed shell and the bumped bulges in the midpart of a crocodile's back.

3. (withdrawn) A method according to claim 1, characterized in that the devices and appliances of different materials, sizes and shapes are provided with profiled surface patterns adapted in relation to their intrinsic size and shape so that the size and

PATENT APPLN. NO. 10/552,616
SUBMISSION UNDER 37 C.F.R. § 1.114

PATENT

shape of the pattern may vary in a way best suited to the devices and appliances in each case. They may even be partial.

4. (currently amended) A body having reduced kinetic friction when in contact with air, gas or a liquid, comprising a surface which contacts said air, gas or liquid and having a part that offers the greatest resistance to motion, the entirety of said surface being uniformly provided with pit-like profiles each in the form of a spherical calotte part having sunken or raised patterns thereon, said body being selected from the group consisting of

- automobiles;
- trains;
- trailers and vehicle top boxes;
- motor cycles;
- airplanes;
- rockets and missiles;
- grenades and serial bombs;
- bullets and shots;
- ships;
- motor boats;
- torpedoes; and
- surf boards.

PATENT APPLN. NO. 10/552,616
SUBMISSION UNDER 37 C.F.R. § 1.114

PATENT

5. (withdrawn) Means according to claim 4, comprising the following devices and appliances of a closed nature, such as various piping installations, which are at present known as having completely smooth inner surfaces:

- Oil and gas pipes (4).
- Air conditioning, water and sewage pipes.
- Feed channels and throats of turbines in hydropower plants.
- Feed pipes with a large head of fall used to supply pipe-fed turbines.
- Intake and exhaust channels and manifolds, exhaust pipes (4) and air inlet ports and channels of combustion engines.

6. (withdrawn) Means according to claim 4, characterized in that they comprise the following fixed structures, which at present are known as completely smooth-surfaced structures, such as:

- Rotor towers of wind power plants, tall and round TV masts/towers.
- Pylons and conductors used in the transmission of electric power.
- Those parts of bridge piers that are in contact with water.
- All other structures that can be profiled if the structure permits and if necessary for protection or performance, to reduce

PATENT APPLN. NO. 10/552,616
SUBMISSION UNDER 37 C.F.R. § 1.114

PATENT

the effect of strong winds or water currents or waves. E.g. gas or oil drilling platforms/production platforms.

7. (withdrawn) Means according to claim 4, characterized in that they comprise those parts of devices and appliances that are supposed to be transparent, which at present are known as being always completely smooth-surfaced, such as:

- Windshields and rear windows of vehicles.
- Protective goggles and visors as personal equipment.
- Windows and protective hoods in different means of transport.
- Protective hoods of vehicle lamps as far as no obstruction to illumination arises.
- The profiling has to be carried out in such manner that it does not obstruct the field of vision.

8. (withdrawn) Means according to claim 4, characterized in that they comprise the following sports gear and garments, which at present are known as being completely smooth-surfaced, such as:

- Full-length competition wear (6). Ski jumping, fast downhill skiing, slalom, skating and skiing.
- Helmets, gauntlets, (6), the shoe part of skates, jumping shoes, spikes, gym shoes and masks.

PATENT APPLN. NO. 10/552,616
SUBMISSION UNDER 37 C.F.R. § 1.114

PATENT

- Rowing jumpers. (The shanks of oars to be profiled as well.)
- Trousers and jumper combinations.
- Attachable number tags, advertisements and vests.

9. (withdrawn) Means according to claim 4, characterized in that they comprise devices and appliances used in motor sports, which at present are known as being completely smooth-surfaced, such as:

- Body parts of automobiles (1 and 2), ailerons, mirrors, intake and exhaust manifolds of engines, exhaust pipes, air intake ports, projecting handrails and sides of tires.

- Surface parts of motor cycles, plexiglass shields, driver's overalls, helmet, intake and exhaust manifolds of the engine, exhaust pipes, brace rods and visor. Fig. 5 and 6, as well as motor sledges and buggies, profiling of surface parts as far as possible. At present they are known as being completely smooth-surfaced. For the engines, the same measures as for those above, and also surface profiling of ice chute toboggans and competition wear. At present, these are known as being completely smooth-surfaced.

10. (withdrawn) Means according to claim 4, characterized in that they comprise the profiling of athletics gear, such as

PATENT APPLN. NO. 10/552,616
SUBMISSION UNDER 37 C.F.R. § 1.114

PATENT

javelins, discs, hammers and shots. At present, these are known as being completely smooth-surfaced.

11. (canceled)